



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,212	12/09/2005	Rudolfus Antonious Van Benthem	21580USWO (C038435/019415	2957
83522	7590	06/23/2009	EXAMINER	
Bryan Cave LLP 1290 Avenue of the Americas New York, NY 10104			FREEMAN, JOHN D	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			06/23/2009 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/560,212

Applicant(s)VAN BENTHEM, RUDOLFUS
ANTONIOUS**Examiner**

John Freeman

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 April 2009 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4, 5, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rätzsch et al. (WO 02/48261) in view of Skoultschi et al. (US 4,770,668).

4. The examiner provides the national stage filing of the international application, US 2005/0020750, as an English translation of WO '261. All references herein refer to US '750.

5. Regarding claims 1 and 4:

6. Rätzsch discloses aminoplast resins [0002]. Such resins include polycondensates of melamine derivatives and C₁-C₁₀ aldehydes [0014]. Rätzsch uses the resins to make microcapsules [0012]. The process to make the microcapsules includes adding the precondensates into an aqueous dispersion of a "core former", curing and then drying the microcapsules [0044].

7. Rätzsch is silent, however, with regard to an aldehyde having an ester endgroup.

8. Skoultschi discloses condensation products of cyclic amines and aldehydes, or their derivatives, to form crosslinking resins without the use of toxic formaldehyde (col 1 ln 7-15; col 2 ln 12-54). The condensation products can be formed from glyoxylic acid hemiacetals, which exhibit reactive properties over a wide pH range (col 4 ln 57-68).

9. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use glyoxylic acid hemiacetals as the aldehyde of Rätzsch's invention because it was a known functional

Art Unit: 1794

equivalent to Rätzsch's exemplary aldehydes while avoiding the use of toxic formaldehyde, yet providing reactivity over a wide pH range.

10. Regarding claim 5:

11. The ratio of melamine derivative to aldehyde ranges from 1:1 to 1:6 [0014].

12. Regarding claim 14:

13. Skoultschi teaches the ester is preferably a methyl- or ethyl-ester (col 5 ln 32-34).

Response to Arguments

14. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

15. The examiner fixed the typographical error of the previous action by appropriately noting the Publication No. of Rätzsch as WO 02/48261. The examiner appreciates Applicant's efforts to clarify the Office Actions of record.

16. Regarding the process of encapsulation disclosed by Rätzsch, Applicant argues Rätzsch does not disclose a solution of an amino compound (V) because the curing agent is a dispersion having a solids content (p17). The examiner respectfully disagrees with this assessment. The compound would still be in a solution, regardless of whether the curing agent is not fully soluble. Note the present claims recite inclusive language, i.e. "comprising," and therefore do not exclude the existence of the solids of the curing agent.

17. Applicant further submits Rätzsch does not disclose a process wherein a core-material dispersion is formed in the solution containing the amino compound (V). The examiner notes claim 1 allows for steps (1) and (2) to occur in either order or simultaneously. Therefore, the "solution" does not necessarily have to contain the amino compound (V), so long as final solution does contain the amino compound (V): the solution in step (2) can merely contain the dispersion of core material before addition of the solution of step (1).

Art Unit: 1794

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Parekh '320 discloses amino-formaldehyde products that are trans-esterified.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Freeman whose telephone number is (571)270-3469. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Freeman
Examiner
Art Unit 1794

/John Freeman/
Examiner, Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794